

Search **Nucleotide** for Limits Index History Clipboard

as

☐ 1: M10901 **Human glucocorticoid receptor alpha mRNA, complete cds** PubMed, Protein, Related Sequences, Taxonomy, OMIM, LinkOut

LOCUS HUMGCRA 4788 bp mRNA PRI 08-NOV-1994
 DEFINITION Human glucocorticoid receptor alpha mRNA, complete cds.
 ACCESSION M10901
 VERSION M10901.1 GI:183032
 KEYWORDS glucocorticoid receptor; glucocorticoid receptor-alpha.
 SOURCE Human lymphoid cell line IM-9, cDNA to mRNA, clones hGR[1.2, 2.9, 5.16] and fibroblast cDNA library (H.Okayama), clones OB7 and OB10.
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 4788)
 AUTHORS Hollenberg,S.M., Weinberger,C., Ong,E.S., Cerelli,G., Oro,A., Lebo,R., Thompson,E.B., Rosenfeld,M.G. and Evans,R.M.
 TITLE Primary structure and expression of a functional human glucocorticoid receptor cDNA
 JOURNAL Nature 318 (6047), 635-641 (1985)
 MEDLINE 86092206
 COMMENT Although [1] did not actually sequence this entire sequence from one contiguous clone (thus eliminating the possibility that this sequence contains segments from multiple genes) their evidence strongly suggests that the alpha clone, OB7, and the beta clone, OB10, are transcribed from the same gene on chromosome 5 by alternate mRNA splicing. Therefore, the predicted alpha mRNA sequence is presented here in its entirety. Positions 1 to 648 were determined from clones OB10 and hGR5.16; positions 649-4788 were determined by overlapping regions of all 5 clones listed on the SOURCE line. The beta clone diverges from this alpha clone in sequence after position 2313. See also the beta GCR mRNA in entry with accession number M11050. [1] reports that the alpha form of glucocorticoid receptor is the predominant physiological form found in the various human and mouse cell lines that they tested. [1] also noted a region of chromosome 16 with enough homology to these clones to hybridize efficiently. Alternate polyadenylation signals present at positions 3101-3106 and 4678-4684 may also be utilized by some mRNAs. A clone OB12 was isolated that used the 3101-3106 signal.

FEATURES Location/Qualifiers
 source 1..4788
 /organism="Homo sapiens"
 /db_xref="taxon:9606"
 /map="5q31-q32"
 mRNA <1..4788
 /product="GCR-a mRNA"
 gene 133..2466
 /gene="GRL"
 CDS 133..2466
 /gene="GRL"
 /note="glucocorticoid receptor alpha (94 kD)"
 /codon_start=1
 /protein_id="AAA52521.1"
 /db_xref="GI:183033"
 /db_xref="GDB:G00-120-017"
 /translation="MDSKESLTPGREENPSSVLAQERGDVMDFYKTLRGGATVKVSAS
 SPSLAVASQSDSKQRRLLVDFPKGSVSNAAQPDLSKAVSLSMGLYMGETETKVMGNDL
 GFPOQGQISLSSGETDLKLLSESIANLNRSTSVPENPKSSASTAVSAAPTEKEFPKTH"

SDVSSEQOHLKGQGTGNGNVKLYTTDQSTFDILQDLEFSSGSPGKETNESPWRSDDL
 IDNCLLSPLAGEDDSFLEGNSEDCKPLILPDTPKIKDNGDLVLSSPSNVTLPOV
 KEDFIELCTPGVIKQEKLGTVYQASFPGAN NKMSAISVHGVTSTGGQMYHY
 DMNTASLSQQQDQKPIFNVIPIPVGSENWNRCSGSDNLTSLGTLNFPGRTVFSNG
 YSSPSMRPDVSSPSSSTATTGPPPKLCLVCSDEASGCHYGVLTGCSCKVFFKRAVE
 GQHNYLCAGRNDICIIDKIRKNCPCACRYRKCLQAGMNLEARKTKKKIKIGIQOATTGVS
 QETSENPNGKTIVPATLPQLTPTLVSLLEVIEPEVLYAGYDSSVPDSTWRIMTTNLML
 GGRQVIAAVKWAKAIPGFRNLHLDDQMTLLQYSWMFLMAFALGWRYSYRQSSANLLCFA
 PDLIINEQRMTLPCMYDQCKHMLYVSSELHRLQVSYEELCMKTLILLSSVPKDGKLS
 QELFDEIRMTYIKELGKAIKREGNSSQNWRQFYQLTKLLDSMHEVVENLLNYCFQTF
 LDKTMSIEFPEMLAEIITNQIPKYSNGNIKKLLFHQK"

BASE COUNT 1471 a 939 c 970 g 1408 t
 ORIGIN 360 bp upstream of BglII site; chromosome 5q.

```

1 ttttttagaaa aaaaaaatat atttccttc tgctccttct gcgttcacaa gctaaagttgt
61 ttatctcggc tgcggcggga actgcggacg gtggcggcg agcggctcct ctgccagagt
121 tgatattcac tgatggactc caaagaatca ttaactcctg gtagagaaga aaaccccagc
181 agtgtgcttg ctacggagag gggagatgtg atggacttct ataaaaccct aagaggagga
241 gctactgtga aggtttctgc gtcttcaccc tcaactggctg tcgcttctca atcagactcc
301 aagcagcgaa gacttttggg tgattttcca aaaggctcag taagcaatgc gcagcagcca
361 gatctgtcca aagcagtttc actctcaatg ggactgtata tgggagagac agaaacaaaa
421 gtgatgggaa atgacctggg attcccacag cagggccaaa tcagcctttc ctcggggaa
481 acagacttaa agcttttggg agaaagcatt gcaaacctca ataggctcag cagtgttcca
541 gagaacccca agagttcagc atccactgct gtgtctgctg ccccccacaga gaaggagttt
601 ccaaaaactc actctgatgt atcttcagaa cagcaacatt tgaagggcca gactggcacc
661 aacggtggca atgtgaaatt gtataccaca gaccaaagca cctttgacat tttgcaggat
721 ttggagtttt ctctcgggtc cccaggtaaa gagacgaatg agagtccctg gagatcagac
781 ctggtgatag atgaaaactg tttgctttct cctctggcgg gagaagacga ttcattcctt
841 ttggaaggaa actcgaatga ggactgcaag cctctcattt taccggacac taaacccaaa
901 attaaggata atggagatct ggttttgtca agccccagta atgtaacact gccccaagtg
961 aaaacagaaa aagaagattt catcgaaact tgcaccctg gggtaatata gcaagagaaa
1021 ctgggcacag tttactgtca ggcaagcttt cctggagcaa atataattgg taataaaatg
1081 tctgccattt ctgttcattg tgtgagtacc tctggaggac agatgtacca ctatgacatg
1141 aatacagcat ccttttctca acagcaggat cagaagccta tttttaatgt cattccacca
1201 attcccgttg gttccgaaaa ttggaatagg tgccaaggat ctggagatga caacttgact
1261 tctctgggga ctctgaactt cctggtcga acagttttt ctaatggcta ttcaagcccc
1321 agcatgagac cagatgtaag ctctcctcca tccagctcct caacagcaac aacaggacca
1381 cctcccaaac ctgcctggt gtgctctgat gaagcttcag gatgtcatta tggagtctta
1441 acttgtggaa gctgtaaaagt tttcttcaaa agagcagtg gaggacagca caattacctta
1501 tgtgctggaa ggaatgattg catcatcgat aaaattcgaa gaaaaaactg cccagcatgc
1561 cgctatcgaa aatgtcttca ggctggaatg aacctggaag ctcgaaaaac aaagaaaaaa
1621 ataaaaggaa ttcagcaggc cactacagga gtctcacaag aaacctctga aaatcctggt
1681 aacaaaacaa tagttcctgc aacgttacca caactcacc ctaccctggt gtcactgttg
1741 gaggttattg aacctgaagt gttatatgca ggatatgata gctctgttcc agactcaact
1801 tggaggatca tgactacgtc caacatgta ggaggcggc aagtgtattg agcagtgaaa
1861 ttgggcaaaag caataccagg tttcaggaaac ttacacctgg atgaccaaat gacctactg
1921 cagtactcct ggatgtttct tatggcattt gctctggggt ggagatcata tagacaatca
1981 agtgcaaacc tgctgtgttt tgctcctgat ctgattatta atgagcagag aatgactcta
2041 cctgcatgt acgaccaatg taaacacatg ctgtatgttt cctctgagtt acacaggctt
2101 caggtatctt atgaagagta tctctgtatg aaaaccttac tgcttctctc ttcagttcct
2161 aaggacggtc tgaagagcca agagctattt gatgaaatta gaatgacctt catcaaagag
2221 ctaggaaaaag ccattgtcaa gagggaagga aactccagcc agaactggca gcggttttat
2281 caactgacaa aactcttga tctcatgcat gaagtgttg aaaaatcctc taactattgc
2341 ttccaaacat ttttgataa gacctagagt attgaattcc ccgagatgtt agctgaaatc
2401 atcaccaatc agataccaaa atattcaaat ggaaatatca aaaaacttct gtttcataca
2461 aagtgactgc cttaataaga atggttgctt taaagaaagt cgaattaata gcttttattg
2521 tataaactat cagtttgtcc tgtagaggtt ttgtgtttt attttttatt gttttcatct
2581 gttgttttgt tttaaatacg cactacatgt ggtttataga gggccaagac ttggcaacag
2641 aagcagttga gtcgtcatca ctttccagtg atgggagagt agatggtgaa atttattagt
2701 taatatatcc cagaaaattg aaaccttaat atgtggacgt aatctccaca gtcaaagaag
2761 gatggcacct aaaccaccag tgcccaaagt ctgtgtgatg aactttctct tcatactttt
2821 ttccacagtt ggctggatga aattttctag actttctgtt ggtgtatccc cccctgtat
2881 agttaggata gcatttttga tttatgcatg gaaacctgaa aaaaagttta caagtgtata
2941 tcagaaaagg gaagttgtgc cttttatagc tattactgtc tgggtttaac aatttctttt
3001 atatttagtg aactacgctt gctcattttt tcttacataa ttttttattc aagttattgt
3061 acagctgttt aagatgggca gctagtctgt agctttccca aataaactct aaacattaat
3121 caatcatctg tgtgaaaatg ggttggtgct tctaacctga tggcacttag ctatcagaag
3181 accacaaaaa ttgactcaaa tctccagtat tcttgcaaaa aaaaaaaaaa aaaaagctca
3241 tattttgtat atatctgctt cagtggagaa ttatataggt tgtgcaaat aacagtccta
3301 actggtatag agcacctagt ccagtgaagg gctgggtaaa ctgtggatga tggttgcaaa
3361 agactaatat aaaaaataac taccaagact cctgtctgt acctaagccc ctatttttgc
3421 aatggatata tggcaaaaaa gctggttaac tattttctt tcaagacctt tgaagtagt

```

```

3481 ttgtataact tcttaaaagt tgtgattcca gataaccagc tgtaacacag ctgagagact
3541 tttaatcaga caaagtaatt cctctcacta aactttaccc aaaaactaaa tctctaatat
3601 ggcaaaaatg gacacacc ctttttcaca ttcccatctg tcaattg gttaatcttt
3661 cctgatggta caggaaagct cagctactga tttttgtgat ttgaactgt atgtcagaca
3721 tccatgtttg taaaactaca catcccta atgtgtccata gagtttaaca caagtcctgt
3781 gaattttctt actgttgaaa attattttta acaaaaataga agctgtagta gccctttctg
3841 tgtgcacctt accaactttc tgtaaaactca aaacttaaca tatttactaa gccacaagaa
3901 attttgatttc tattcaaggt ggccaaatta tttgtgtaat agaaaactga aaatctaata
3961 ttaaaaaatat ggaacttcta atatatTTTT atatttagtt atagtttcag atatatatca
4021 tatttgtatt cactaatctg ggaagggaag ggctactgca gctttacatg caatttatta
4081 aaatgattgt aaaatagctt gtatagtgtt aaataagaat gattttttaga tgagattggt
4141 ttatcatgac atgttatata tttttttagg gggcacaaga aatgctgatg gataacctat
4201 atgatttata gtttgtacat gcattcatac aggcagcgat ggtctcagaa accaaacagt
4261 ttgctctagg ggaagaggga gatggagact ggtcctgtgt gcagtgaagg ttgctgaggc
4321 tctgaccag tgagattaca gaggaagtta tcctctgcct ccattctga ccacccttct
4381 cattccaaca gtgagtctgt cagcgcaggt ttagtttact caatctcccc ttgcactaaa
4441 gtatgtaaag tatgtaaaca ggagacagga aggtggtgct tacatcctta aaggcaccat
4501 ctaatagcgg gttactttca catacagccc tccccagca gttgaatgac aacagaagct
4561 tcagaagttt ggcaatagtt tgcatagagg taccagcaat atgtaaatag tgcagaatct
4621 cataggttgc caataataca ctaattcctt tctatcctac aacaagagtt ttttccaaa
4681 taaaatgagg acatgttttt gttttctttg aatgcttttt gaatgttatt tgttattttc
4741 agtattttgg agaaattatt taataaaaaa acaatcattt gctttttg

```

//

Restrictions on Use | Write to the HelpDesk
NCBI | NLM | NIH



PubMed Nucleotide Protein Genome Structure PopSet Taxonomy OMIM

Search **Nucleotide** for Limits Index History Clipboard

Display **Default View** as **HTML**

☐ 1: X03348 **Human mRNA for beta-glucocorticoid receptor (clone OB10)** PubMed, Protein, Related Sequences, Taxonomy, OMIM, LinkOut

LOCUS HSGCRBR 3791 bp mRNA PRI 12-SEP-1993
 DEFINITION Human mRNA for beta-glucocorticoid receptor (clone OB10).
 ACCESSION X03348 M11050
 VERSION X03348.1 GI:31681
 KEYWORDS glucocorticoid receptor.
 SOURCE human.

ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Vertebrata; Mammalia; Eutheria;
 Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 3791)
 AUTHORS Hollenberg, S.M., Weinberger, C., Ong, E.S., Cerelli, G., Oro, A.,
 Lebo, R., Thompson, E.B., Rosenfeld, M.G. and Evans, R.M.
 TITLE Primary structure and expression of a functional human
 glucocorticoid receptor cDNA
 JOURNAL Nature 318 (6047), 635-641 (1985)
 MEDLINE 86092206

FEATURES
 source Location/Qualifiers
 1..3791
 /organism="Homo sapiens"
 /db_xref="taxon:9606"
 CDS
 133..2361
 /note="(aa 1-742)"
 /codon_start=1
 /product="beta-glucocorticoid receptor"
 /protein_id="CAA27054.1"
 /db_xref="GI:31682"
 /db_xref="SWISS-PROT:P04150"
 /translation="MDSKESLTPGREENPSSVLAQERGDVMDFYKTLRGGATVKVSAS
 SPSLAVASQSDSKQRRLLVDFPKGSVSNAQQPDLSKAVSLSMGLYMGETETKVMGNDL
 GFPOQGOISLSSGETDLKLLSESIANLNRSTSVPENPKSSASTAVSAAPEKEFPKTH
 SDVSSEQQHLKGQTGTNGGNVKLYTTDQSTFDILQDLEFSSGSPGKETNESPWRSDDL
 IDENCLLSPLAGEDDSFLLEGNSNEDCKPLILPDTKPKIKDNGDLVLSSPSNVTLPOV
 KTEKEDFIELCTPGVIKQEKLGTVYQCASFPGANIIGNKMSAISVHGVTSTGGQMYHY
 DMNTASLSQQQDQKPIFNVIPPPIVGSSENWNRCSGSGDDNLTSLGTLNFPGRTVFSNG
 YSSPSMRPDVSSPPSSSSTATTGPPPKLCLVCSDEASGCHYGVLTCSGCKVFFKRAVE
 GQHNYLCAGRNDICIIDKIRRNCPACRYRKCLQAGMNLEARKTKKKIKGIQQATTGVS
 QETSENPKNKTIVPATLPQLTPTLVSLLEVIEPEVLYAGYDSSVPDSTWRIMTTLNML
 GGRQVIAAVKWAKAIPGFRNLHLDQMTLLQYSWMFLMAFALGWSYRQSSANLLCFA
 PDLIINEQRMTPCMYDQCKHMLYVSSELHRLQVSYEEYLCMKTTTTLLSSVPKDGKLS
 QELFDEIRMTYIKELGKAIVKREGNSSQNWRFYQLTKLLDSMHENVMWLKPESTSHT
 LI"

misc_feature 3168..3173
 /note="pot. polyA signal"

misc_feature 3539..3545
 /note="pot. polyA signal"

misc_feature 3770..3775
 /note="put. polyA signal"

polyA_site 3791

BASE COUNT 1162 a 759 c 808 g 1062 t
 ORIGIN

1 ttttttagaaa aaaaaaatat atttccctcc tgctccttct gcgttcacaa gctaagtgtg
 61 ttatctcggc tgcggcgga actgcggacg gtggcgggcg agcggtcct ctgccagagt
 121 tgatattcac tgatggactc caaagaatca ttaactctg gtagagaaga aaacccacgc
 181 agtgtgcttg ctcaggagag gggagatgtg atggacttct ataaaacct aagaggagga
 241 gctactgtga aggtttctgc gtcttcaccc tcactggctg tgccttctca atcagactcc

301	aagcagcgaa	gacttttggg	tgattttcca	aaaggtcag	taagcaatgc	gcagcagcca
361	gatctgtcca	aagcagtttc	actctcaatg	ggactgtata	tggagagac	agaaacaaaa
421	gtgatgggaa	actctggg	attcccacag	cagggccaaa	ctcttc	ctcggggaa
481	acagacttaa	agcttttggg	agaaagcatt	gcaaacctca	atgtgtcgac	cagtgttcca
541	gagaacccca	agagttcagc	atccactgct	gtgtctgctg	ccccacaga	gaaggagttt
601	ccaaaaactc	actctgatgt	atcttcagaa	cagcaacatt	tgaagggcc	gactggcacc
661	aacggtggca	atgtgaaatt	gtataccaca	gaccaaagca	cttttgacat	tttgaggat
721	ttggagtttt	cttctgggtc	cccaggtaaa	gagacgaatg	agagtccttg	gagatcagac
781	ctgttgatag	atgaaaactg	tttgccttct	cctctggcgg	gagaagacga	ttcattcctt
841	ttggaaggaa	actcgaatga	ggactgcaag	cctctcattt	taccggacac	taaacccaaa
901	attaaggata	atggagatct	ggttttgtca	agccccagta	atgtaacact	gccccaaagt
961	aaaacagaaa	aagaagattt	catcgaactc	tgcaccctcg	gggtaattaa	gcaagagaaa
1021	ctgggcacag	tttactgtca	ggcaagcttt	cctggagcaa	atataattgg	taataaaatg
1081	tctgccattt	ctgttcattg	tgtgagtacc	tctggaggac	agatgtacca	ctatgacatg
1141	aatacagcat	ccctttctca	acagcaggat	cagaagccta	tttttaattg	cattccacca
1201	attcccgttg	gttccgaaaa	ttggaatagg	tgccaaaggat	ctggagatga	caacttgact
1261	tctctgggga	ctctgaactt	ccctggctga	acagtttttt	ctaattggct	ttcaagcccc
1321	agcatgagac	cagatgtaag	ctctctcca	tccagctcct	caacagcaac	aacaggacca
1381	cctcccaaac	tctgcctggg	gtgctctgat	gaagcttcag	gatgtcatta	tggagtctta
1441	acttgtggaa	gctgtaaaagt	tttcttcaaa	agagcagtg	aaggacagca	caattacct
1501	tgtgctggaa	ggaatgattg	catcatcgat	aaaattcgaa	gaaaaaactg	cccagcatgc
1561	cgctatcgaa	aatgtcttca	ggctggaatg	aacctggaag	ctcgaaaaac	aaagaaaaaa
1621	ataaaaaggaa	ttcagcaggc	cactacagga	gtctcacaag	aaacctctga	aaatcctggg
1681	aacaaaacaa	tagttcctgc	aacgttacca	caactcacc	ctacctgggt	gtcactgttg
1741	gaggttattg	aacctgaagt	gttatatgca	ggatatgata	gctctgttcc	agactcaact
1801	tggaggatca	tgactacgct	caacatgtta	ggaggcgcc	aagtgtttgc	agcagtgaaa
1861	tgggcaaaag	caataccagg	tttcaggaa	ttacacctgg	atgaccaaat	gacctactg
1921	cagtactcct	ggatgtttct	tatggcattt	gctctggggg	ggagatcata	tagacaatca
1981	agtgcaaacc	tgctgtgttt	tgctcctgat	ctgattatta	atgagcagag	aatgactcta
2041	ccctgcatgt	acgaccaatg	taaacacatg	ctgtatgttt	cctctgagtt	acacaggctt
2101	caggtatctt	atgaagagta	tctctgtatg	aaaaccttac	tgcttctctc	ttcagttcct
2161	aaggacggtc	tgaagagcca	agagctattt	gatgaaatta	gaatgaccta	catcaaagag
2221	ctagggaaaag	ccattgtcaa	gagggaagga	aactccagcc	agaactggca	gcgggtttat
2281	caactgacaa	aactcttga	ttctatgcat	gaaaaatgta	tgtgggttaa	accagaaagc
2341	acatctcaca	cattaatctg	atttttcatt	caacaatctt	ggcgctcaaa	aaatagaact
2401	caatgagaaa	aagaagatta	tgtgcacttc	gttgtcaata	ataagtcaac	tgatgtcat
2461	cgacaactat	aggaggtttt	tcattaaatg	ggaaaagaag	ctgtgccttt	ttaggatacg
2521	tgggggaaaa	gaaagtcac	tttaattatg	tttaattgtg	atttaagtgc	tatatgggtg
2581	tgctgtttga	aagcagattt	atttcctatg	tatgtgttat	ctggccatcc	caaccccaac
2641	tgttgaagtt	tgtagtaact	tcagtgaag	ttggttactc	acaacaaatc	ctgaaaagta
2701	tttttagtgt	ttgtaggtat	tctgtggga	actatacaag	cagaactgag	gcacttagga
2761	cataaacctt	ttgggtata	tatatccaaa	tgcctaaaa	tatgggagga	aaccttggcc
2821	accccaaaaag	gaaaactaac	atgattttgt	tctatgaagt	gctggataat	tagcatggga
2881	tgagctctgg	gcatgccatg	aaggaaagcc	acgctccctt	cagaattcag	aggcagggag
2941	caattccagt	ttcacctaag	tctcataatt	ttagtccctt	tttaaaaacc	ctgaaaacta
3001	catcaccatg	gaatgaaaaa	tattgttata	caatacattg	atctgtcaaa	cttcagaac
3061	catggtagcc	ttcagtga	tttccatctt	ggctgggtcac	tccctgactg	tagctgtagg
3121	tgaatgtgtt	tttgtgtgtg	tgtgtctggg	tttagtgtca	gaagggaat	aaaagtgtaa
3181	ggaggacact	ttaaaccctt	tgggtggagt	ttcgtaattt	cccagactat	tttcaagcaa
3241	ctggtgccac	ccaggattag	tgaccaggtt	ttcaggaaa	gatttgcttc	tctctagaaa
3301	atgtctgaaa	ggattttatt	ttctgatgaa	aggctgtatg	aaaataccct	cctcaaataa
3361	cttgcttaac	tacatataga	ttcaagtgtg	tcaatattct	attttgtata	ttaaatgcta
3421	tataatgggg	acaaatctat	attatactgt	gtatggcatt	attaagaagc	tttttcatta
3481	ttttttatca	cagtaatttt	aaaatgtgta	aaaattaaaa	ccagtactc	ctgtttaaaa
3541	ataaaaagttg	tagtttttta	ttcatgctga	ataataatct	gtagttaaaa	aaaaagtgtc
3601	tttttaccta	cgcagtga	tgtcagactg	taaaaccttg	tgtggaaatg	tttaactttt
3661	attttttcat	ttaaatttgc	tgttctggta	ttaccaaacc	acacatttgt	accgaattgg
3721	cagtaaatgt	tagccattta	cagcaatgcc	aaatatggag	aaacatcata	ataaaaaaat
3781	ctgctttttt	c				

//

Restrictions on Use | Write to the HelpDesk
NCBI | NLM | NIH